# All about terospin

### Message from the Director



#### Dear Readers

2015 was an eventful year and the highlight was the ITMA show in Milan. Response to our participation at ITMA was quite satisfying. It also gave us the opportunity to increase the visibility of TeraSpin brand on a world forum. New alliances were forged and old ones renewed at the event. We now look forward to gaining fresh grounds in 2016.

K P Singh, Director-Operations

TeraSpin continues its march forward on new product developments. Smart yarn catcher for spindles was unveiled at ITMA. It will still be a few months before we can open it up for commercial sale, but field trials are on and the results are encouraging. Its unique design ensures that residual yarn is not accumulated despite repeated doff cycles, thereby improving its performance.

Riding high on the success of the Smart cradle for ring frames, TeraSpin has also developed Smart cradles for the PK 1500 drafting for roving frames. Its design concept and advantages are also same – it ensures smooth rotation and uniform tension of the apron over a long period of time despite any variation in apron elasticity and/or length that might creep in with prolonged use. Also, the apron mounting and dismounting has become much easier. Featured in this newsletter are details on the latest developments at TeraSpin. Hope you find this insightful.

Before I conclude, let us pay our respects to late Mr Atul Bhagwati, our Chairman Emeritus, who passed away on 19 December 2015. A visionary, he was a leading light for the textile engineering industry. He will always be remembered for the legacy that he has left behind.

With best regards

K P Singh

# **Product Showcase**

#### The PK 2025

The PK 2025 is a tried and tested ring frame weighting arm that has stood the test of time. With the introduction of Smart cradle to go with it, the PK 2025 drafting system enables a significant reduction in yarn irregularities.

#### Longer front roller element

It is not just the spring based loading of top rollers that make this an effective system, but also the way the force is applied on the top roller arbour. This is made possible by the unique design that exerts leveraged force on the front roller. In TeraSpin's PK 2025 the lever arm of the weighting arm is longer than the weighting arms for 2nd and 3rd weighting elements.



TeraSpin at ITMA 2015



TeraSpin's PK 2025









Shift in front roller overhang is inversely proportional to the length of the lever arm connecting the arbour to the fulcrum point

The longer lever arm of the front roller weighting element minimises shift in top roller overhang from the starting position and the final position at the end of the buffing cycle, when the top roller diameter might have been reduced by up to 3 mm. Closer the fulcrum point to the front roller axis, the more likely is the shift in overhang after cot buffing because the shift would be along an arc traced by the front roll around the pivot point of the loading element. Hence the longer weighting element for the front roller is an advantage.

#### Maintenance free

This design has stood the test of time over decades and requires little attention. The system is so robust that some mills like to extend the cots usability by starting off with slightly bigger cots to squeeze in extra buffing cycles and thus keep operational costs low.

## News and events

#### TeraSpin at ITMA 2015

The TeraSpin brand got a fillip at ITMA-Milan in November 2015. The complete product range was on display and a lot of interest was generated amongst visitors from all over the world. Both, machine makers and spinning mills from around the world, showed interest in TeraSpin products. Orders followed and for the first time exports were made to Egypt and Mexico.



TeraSpin at ITMA 2015





#### **New territories**

TeraSpin expands its reach across the world with its new channel partners in Egypt, Mexico, and Uzbekistan.

Mr Reda Awika Awika Trading Est. 25 Dr Mohamed Maamoun St., El Hegaz Sq. 11351 West Heliopolis, Heliopolis - Cairo, Egypt Mr Cesar Adrian Govina Molina Commercializadora GM 21 S.A. de C.V. Felipe Santiago Xicotencatl Edificio E 1-4 No. 301 U.M. Jose Ma. Morelos y Pavon, Cuautitlan Izcalli Edo. Mex. 54750, Mexico Mr Khusan Ismailov and Mr. Murod Akhmedov Master Mill Service 85, Shakhrisabz str., Yashnabad district, Tashkent, Uzbekistan

#### TeraSpin spindles on KTTM ring spinning machines

Having successfully tested TeraSpin drafting and spindles at three reputed spinning mills in India since November 2013 with the quality results being at par or better than the competition, KTTM has also begun using TeraSpin drafting and spindles for its ring spinning machines. The first KTTM project with TeraSpin drafting and spindles for 9 ring frames of 1440 spindles each (12,960 spindles) was commissioned successfully at Shree Giriraj Cotspin Pvt. Ltd., Rajkot.

#### Shameem Spinning Mills, Bangladesh – outstanding results with TeraSpin drafting system

Shameem Spinning Mills, Bangladesh, is one of the largest enterprises of the Jamuna Group, a 3 decade old organisation having diverse business interests in electrical engineering, chemical, leather, garments and textiles – including spinning, knitting and dyeing, cosmetics, toiletries, beverages, real estate, housing, print and electronic media sectors!

Naturally, the Jamuna Group's spinning mill is a high efficiency unit, always upgrading its equipment and processes. Shameem is a modern yarn spinning mill which produces 24,000 kg/day of yarn with latest plant and machinery and advanced testing equipment to ensure the highest standard of quality and productivity. Their product range includes cotton, mélange, and blended yarns.

Shameem's state-of-the-art facility at Bangladesh is mostly equipped with Chinese preparatory machines. It has 49,920 spindles (104 frames x 480 spindles) of ring spinning machines of Chinese Jingwei FA 506 make and 2,160 spindles (18 frames x 120 spindles) of roving machines, also of Jingwei make.

With an aim of getting an improved productivity and reduced yarn imperfections, Shameem accepted TeraSpin's proposal to test run its PK 2025 drafting system. The initial trial reports showed 9 to 50% improvement in IPI (yarn imperfections). Encouraged by the outstanding results, Shameem decided to upgrade its entire lot of 49,920 ring spinning spindles and 2,160 roving frame spindles with TeraSpin components.

The modernisation package included:

- Replacement of existing spindles with new TeraSpin spindles with HF1 inserts
- Replacement of existing weighting arms on ring frames with TeraSpin PK 2025 drafting with Smart cradle
- Replacement of existing weighting arms on roving frames with TeraSpin PK 1500 drafting

The improvements in operations achieved were:

- 1. 10% increase in spindle speed, while keeping the end breakage rate the same
- 2. Reduction of yarn imperfections
- 3. Higher productivity per kW of energy

As an evolving private company that has continually grown within the competitive industry in Bangladesh, Jamuna Group possesses high values; but the most crucial value of the company is its human resource as espoused by their honourable chairman, Mr Md Nurul Islambabul, whose name is inseparably associated with Jamuna group.

An architect, a pioneer, and ultimately an industrial leader in the private sector, Mr Islambabul heralded the Jamuna's appearance in the area of private industrial sector in 1974 with the mission and vision of building newly independent Bangladesh as a happy and prosperous country. Jamuna started its journey with the Jamuna Electric Manufacturing Co. Ltd in 1974 and it pioneered the manufacturing electrical accessories and fittings in Bangladesh since 1975

Shameem is very happy with the results – improvements in productivity, efficiency and quality; all at a fraction of the cost of investing in new machines. TeraSpin is proud to be part of Shameem's modernisation project!

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